

- NOTE: RED TEXT ARE ITEMS TO ADDRESS
- Additional requirements can be found in the current The "Private Development Engineering Single Family Home Grading and Drainage Plan Criteria" can be found at:
<https://www.tempe.gov/government/community-development/building-safety/applications-forms> Scroll to "Civil Engineering & Right of Way Private Development and select "Single Family Home Grading & Drainage."
 - Engineering plans to be submitted on 24"x36" pdf format and legible at 50% reduction. Minimum text size is 12 pt. font.
 - All plans and reports must sealed by a professional civil engineer registered in the State of Arizona. Registrant signature must not cover name or license number per Arizona Administrative Code, p. 24
 - Maximum scale for engineering plans is 1"= 30' and show a bar scale
 - Include the most current local Arizona Blue Stake block on all sheets
 - All plan sheets must show north arrow, pointing to right or top of sheet, per Engineering Design Criteria, p. 15, note 3
 - Compress pdf files. All plan sheets shall be saved in landscape (horizontal) orientation. Save as PDF/A.
 - PDFs shall be first generation vector-based file (direct conversion from AutoCAD, ArchiCAD, MS Word, etc and not scanned)
 - Provide separate pdfs for each document. Do not combine plans with reports or other documentation.
 - Print all graphics and text in black
 - Avoid using photos because the plans will be hard to read when reduced to 11 x 17 and printed for field inspectors
 - Engineering plans must be submitted as a separate PDF package under the EN number. Submit under the EN number in LANDSCAPE orientation through the Citizen's Portal: <https://epermits.tempe.gov/CitizenAccess/Default.aspx>
 - This document applies only to one single-family home

LEGAL DESCRIPTION
(per Maricopa County Assessor's Office)

VICINITY MAP
(Show streets closest to property)

OWNER'S NAME AND ADDRESS
(Verify with Maricopa County Assessor's website or provide warranty deed or title report dated within 6 months)

NAME AND ADDRESS OF ENGINEERING COMPANY AND MAIN CONTACT

PROPERTY INFORMATION

Assessor's Parcel Number (APN):

Gross Area: s.f. and acres
Net Area: s.f. and acres
Disturbed Area: s.f. and acres

PROJECT DESCRIPTION

- SITE PLAN NOTES**
- This set of plans has been reviewed for compliance with City requirements prior to issuance of construction permits. However, such review shall not prevent the City from requiring correction of errors in plans found to be in violation of any law or ordinance.
 - The City does not warrant any quantities shown on these plans.
 - The City approval is for on-site grading, drainage. Plan check is valid for one year following the initial application date. Construction permits must be obtained prior to plan check expiration date. Permits expire one year from issue date but may be extended upon request and the payment of appropriate fees for subsequent periods of six months each.
 - An approved set of plans shall always be available on the job site.
 - Call the engineering inspection request line at (480) 350-8072 at least one business day before construction to request inspection of grading and drainage. Construction work concealed without inspection by the City shall be subject to exposure at the contractor's expense.
 - The homeowners shall contact ARIZONA BLUE STAKE (811) 48 hours prior to construction.
 - All broken or displaced existing concrete curb, gutter, or sidewalk in front of and adjacent to the property shall be removed and replaced as directed by the City of Tempe Private Development Engineering Division inspector.

Lot Coverage

House s.f.
Other Structures s.f.
Patio s.f.
Sidewalk s.f.
Driveway s.f.
Pool s.f.

Total s.f. and percentage of coverage:

RETENTION CALCULATION

$V = (P \div 12) * A * C$
 V = Volume required to retain (cubic feet)
 P = Precipitation Depth (in inches) of storm water required to be retained
 A = Total gross area of lot (in square feet) plus any additionally required areas
e.g. ½ streets (excluding arterials) and alleys
 C = Coefficient of Non-Absorption

$P = 2.2$ inches (based on the 100-year, 2-hour storm event)
 $C = 0.95$
 $V = (2.2 \div 12) * A * (0.95)$

Retention Required Total: c.f.

Retention Provided Total: c.f.

- On cover sheet, provide dissipation calculation of basins over 1' without a drywell showing that volume can be dissipated within a 36-hour period per Engineering Design Criteria, p. 56 item g.
- On cover sheet, provide dissipation rate calculation of drywell on cover sheet. This should be specific to the site. Formula should show number of hours to dissipate entire volume. Typically, underground tanks require dual-chamber drywells
- On cover sheet, show drywell percolation calculation, which needs to be 0.1 cfs unless percolation test is provided, and then 1/2 of rate is allowed. Refer to Engineering Design Criteria, p. 63, note h.
- On cover sheet, provide storage calculation for any underground storage tanks.

(Owner must complete information BEFORE plan approval and must be included on final submittal of plan)

MCESD DWR #

By:

Maricopa County Department of Environmental Services Date
(required for new septic system or any changes to existing septic system)

I hereby acknowledge this Grading & Drainage design and agree to contact the Private Development Engineering Inspector at 480-350-8072 for a pre-construction meeting. Any changes to or deviations from this plan require City approval.

OWNER - Signature & Print Name DATE
(Provide minimum 3/4" space for signature)

APPROVAL FOR DRAINAGE ONLY

CITY OF TEMPE DATE
(Provide minimum 3/4" space for signature)

Contact Arizona 811 at least two full working days before you begin excavation



Call 811 or click [Arizona811.com](https://www.arizona811.com)